

33.05
109
22



IOWA STATE TRAVELING LIBRARY
MAR 20 1963

ST. TRAVELING LIBRARY
ST. HISTORICAL BLDG
DES MOINES 19 IA

Volume 22

March, 1963

Number 3

THE GOOSE FLIGHT—A TRUE SPECTACULAR



Virtually a cloud of geese rise from the water at Forneys Lake.

Jack Kirstein Photo.

The Opening Event of the Warm Weather Months!

Denny Rehder

Most of us look with a jaundiced eye at anything labeled spectacular. Entertainment industries have worked the word to a point of non usage.

Many of us are inclined to think in terms of the spectacular we think of the natural world. The sight of a summer storming its thunderheads in the west; a beautiful sunset seen from an overlook at Waubonsie State Park; a deer bounding away, its white erect; these are things we may call spectacular.

This month brings another spectacular to Iowa—the spring goose flight. The northern migration of geese through the Iowa southwest will be one of the world's leading wildlife spectacles. Accustomed to being during the hunting season to think of geese in terms of scores or twenties, in the spring we find an influx of birds numbering in the hundreds of thousands.

Several thousand Iowans may journey to southwest Iowa every year to see the goose flight. But, when they take the story home, words are usually inadequate to describe what they saw. Photographs of geese often fail to illustrate the magnitude of the sight. And the sound—that muted roar of a half-million birds calling and flapping wings—may never be captured.

The geese are predominately blues and snows with white-fronts and mallards accompanying. They begin the flight from their Gulf Coast

wintering grounds, hurrying up the Missouri Valley north to their nesting grounds in Canada and the Arctic.

They are so anxious to move north, that the weather often slows their progress. When they reach southwest Iowa, weather conditions to the north are usually adverse. Since there is an abundance of food in this area, the birds stay there waiting for better weather. More birds keep piling in from the south, until the concentrations reach major proportions. This is when the word goes out and people start flocking to see the sight.

Where to See It

How do you go about finding the geese and observing the flight? A good starting place is Forneys Lake just northwest of Thurman. There are usually good concentrations of geese there and other observers can tell you about nearby locations with geese. On a typical day you might notice large flocks along the roads working last year's cornfields. Sometimes it looks like an advancing army with the flock blanketing the width of the field. The birds to the rear are constantly flying into the front ranks to get first chance at the waste corn.

The sky will echo the call of the wavy lines of geese flying in from the south or returning from a venture to the north.

At Forneys you can expect to see the cars of hundreds of people out

(Continued on page 24)

Iowa Conservationist

Vol. 22 March, 1963 No. 3

Published monthly by the State Conservation Commission, East 7th and Court Avenue, Des Moines, Iowa. Address all mail (subscriptions, change of address, Form 3579, manuscripts, mail items) to street address above.

Subscription price: two years at \$1.00
Second class postage paid at
Des Moines, Iowa
(No Rights Reserved)

HAROLD E. HUGHES, Governor
GLEN G. POWERS, Director
JAMES R. SHERMAN, Editor
DENNIS L. REHDER, Managing Editor
CAROL BUCKMANN, Contributing Editor

MEMBERS OF THE COMMISSION

A. N. HUMISTON, Chairman, Cedar Rapids
GEORGE H. MEYER, Vice Chairman, Elkader
SHERRY R. FISHER, Des Moines
EARL E. JARVIS, Wilton Junction
ROBERT E. BEEBE, Sioux City
ED WEINHEIMER, Greenfield
CLYDE M. FRUDDEN, Greene
CIRCULATION THIS ISSUE 53,000

COMMISSION MINUTES

Des Moines, February 6

The Commission met with Representative Katherine Falvey, during which time the Superintendent of Engineering reported on the possible use of depressed area funds in the Monroe County small lake project. A committee of three staff members was named to formulate a working agreement between the Conservation Commission and County Conservation Boards.

Fish and Game

The 1963 fishing season regulations were approved.

Plans for a new service building at the Mount Ayr Fish Hatchery, Ringgold County, were approved.

The Commission authorized the charging of camping fees at Bays Branch, Guthrie County, and Lake Odessa, Louisa County.

Authorization was given for the opening of certain lakes and rivers to promiscuous fishing if the oxygen content is low. Such openings would be at the discretion of the Director.

A request by the Highway Commission to dump fill material on area in the Smith Refuge, Pottawattamie County, was approved.

Lands and Waters

The Missouri River Coordinator reported on a meeting with the Corps of Engineers concerning Missouri River Development.

A tree planting program on Lake Cornelia, Wright County was approved.

An option to purchase 313 acres at a cost of \$48 an acre as an addition to Waubonsie State Park in Fremont County was approved.

The Commission gave tentative approval to a proposal by the Forest City-Mason City delegation to install a ski run at Pilot Knob State Park. The delegation agreed to present a complete development plan at the next Commission meeting.

A staff committee of four was appointed to make recommendations concerning small lakes and Public Law No. 566 projects.

The Commission ordered the removal of an obstruction in the Cedar River near Waterloo by the responsible party.

County Conservation Activities

Lee County received approval for the acquisition by management agreement with the Highway Commission of the following areas: Donnelson Roadside Park, one acre; Montrose Roadside Park, two acres; and Roadside Park north of Keokuk, one acre.

Hardin County received approval for the acquisition of land for Long Memorial Park, a 15-acre gift for fishing and picnicking.

Hardin County also received approval for the acquisition of 70 acres at \$70 per acre, to be known as J. L. Reece Memorial Park and to be developed for multiple use.

Polk County received approval for the acquisition of land for Weh-weh-neh-kee Park consisting of .21 acres for \$1 as an access to existing lands.

Worth County received approval for the acquisition of one-half acre by \$10 per year lease to be known as Deer Creek Roadside Park.

Monona County received approval for the acquisition of 80 acres by gift to be known as Whiting Woods and provide camping and picnicking.

The following development plans were approved: Appanoose County, Lelah Bradley Park; Humboldt County, Frank A. Gotch Park; Marshall County, Bangor Square Park; and Sioux County, Oak Grove residence remodeling.

General

The Superintendent of Public Relations reported on planning for out-of-state sports shows.

Travel was approved for the following: North American Wildlife Conference, March 4-6, Detroit, Michigan; District Game Managers and Unit Game Managers to enter border states; Aquatic Weed Control Society, February 12-13, Chicago, Illinois; Mississippi Flyway Council, April 3-5, Port Clinton, Ohio; Great Plains Fisheries Ass'n, February 25-26, Deadwood, South Dakota; Missouri River Interagency Meeting, February 19-20, Vicksburg, Mississippi.

LIFE ON THE BOTTOM OF A STREAM

David H. Thompson

A stream conceals a teeming world of bottom-dwelling animals that are the food supply for all stream fish and a source of live bait for catching them. Raccoons, mink, muskrats, ducks, shore birds, turtles and frogs hunt here for mussels, snails, crayfish and aquatic insects. These insects, after passing their young stages on the stream bottom, emerge as swarms of flying adults devoured by dozens of kinds of song birds. These, too, are the insects that fly fishermen imitate in making their artificial lures.

Streams of all sizes have about the same kinds of bottom animals, whether a brook small enough to be stepped across or the mile-wide Mississippi. The greatest differences are found when the popu-

PLANS FOR AN OUTDOOR SEASON

Denny Rehder

"This year let's plan on seeing and doing more in our home state. Someone expressed this goal during a discussion yesterday about the opportunities available for looking and doing around Iowa. During the course of the conversation, several ideas came up that might be included in your plans for the warm-weather months.

"... but I'd really like to take the time to get around to some of the parks this spring when the wild flowers are in bloom... nothing can touch that spring goose flight; I'd rather miss New Year Eve than that..."

"I'd just like to take more time for fishing. You know, east trout fishing in northeast Iowa... walleye fishing in the natural lakes... big bass in the artificial lakes... catfishing in the river... oh, all kinds of river fishing..."

"That's all fine, but I want to pack up the camp gear and go to some of these newer areas... Pike's Peak has a new camp and I never have taken that trail down to the sand cave with all the different colored sands... Prairie Rose has opened up for camping this year, and I enjoy Backbone for almost any activity... Yellow River Forest is going to be open this year for the camper..."

"Speaking of Yellow River, I want to camp there and do some hiking and fishing... three thousand acres in that Paint Creek area..."

"I've never taken a boat ride back into the wilds of Lake Odessa. I'd like to do that... and I'd like to take a boat trip on the Mississippi River and hike through some of those sand dunes near the oxbows..."

"How about a Sunday drive to one of the prairie areas? That's always interesting..."

"Driving the Great River Road along the Mississippi River would be a real education... watching some of the commercial fishery work... seeing the barges moving up and downstream and through the locks... get in on that good fishing over there."

Yes, there's a wealth of things to see and do in Iowa—relaxing, satisfying recreation that can't be beat. Come on out and join in. It'll be a great season, and the company is always welcome!

lations from different types of bottom are compared—rock, gravel, sand and mud. These main types result from the sorting action of the water, especially during floods. Rock bottom is found in the fastest water because all smaller materials are swept downstream. As the current becomes slower the gravel, then the sand, and finally the mud, settle out.

A flat rock with water swirling around it on the riffle of a clean stream hides dozens of small aquatic animals. If the rock is lifted, crayfish and perhaps a small fish are glimpsed as they scurry into other hiding places. On its underside, flat-bodied mayfly nymphs with tufts of gills on the sides skitter over the wet surface. Also, here are slender stonefly nymphs with two caudal filaments. Caddisfly larvae, which weave tiny nets to catch their food, are seen and sometimes a strange species that lives in a coiled tube made of sand grains glued together. Both air-breathing and gill-breathing snails may be present, as well as creeping adult beetles. A broad, rubbery leech, clinging with suckers fore and aft, may be hovering over a blob of bright yellow eggs. A long slender leech glues brown seed-like egg cases to the rock.

With luck, you may find a hellgrammite, the big ferocious-looking young of the Dobson fly and a favorite bait for catching game fish. Gravel bottom usually supports more pounds of animal life per acre than any other part of a stream. When a square foot of it is dredged up, picked over carefully, rinsed and strained, it commonly yields a wriggling mass weighing an ounce and made up of 20 or 30 species. Also common are the little fingernail clam "duck shells," whose pinhead young are born fully formed. Most striking creatures on gravel bottom of creeks and rivers are the large, thick-shelled mussels from which pearl buttons are made. The sand bottom of a stream like a sand area on land, often an almost lifeless desert. Periodic sand shifts about too frequently, or perhaps it provides little shelter for freshwater animals. The slow addition of sediment makes mud bottom a rich water soil. Blood worms, tinianatives of earthworms, have tubes into which they retreat at night come from mud-dwelling younger stages. The head "cisco flies" that pile up on street lights in river-front areas come from the large river nymphs that burrow in mud. Luskus are represented by shells and kinds of mussel snails not found in swifter streams. Leeches squirm and drag nymphs lumber over the oozing tom.

When a clean stream becomes polluted with sewage, most bottom animals die. Many stoneflies and caddisflies are sensitive and disappear first. More and more pollution, drop out one by one. At last the bottom is covered with a but a waving mat of sludge like the thick pile on a road. The pollution is stopped, the animal life slowly comes back.



Striped Skunk.

Jim Sherman Photo.

IOWA MAMMALS

Eddie Mustard
Game Biologist

STRIPED SKUNK

Mephitis mephitis

Identification Adults range in length from 20-30 inches including a 7-9 inch tail. Weights vary from 4-10 pounds. The distribution of white fur varies with individual skunks and an occasional all-black animal is found. Skunks are about the size of house cats and are easily recognized by everyone.

Range Throughout Iowa.

Habitat Varied, may be found anywhere but prefers a dry den.

Reproduction A male may den up with several females during period of winter sleep (not true hibernation) and are promiscuous breeders. Young are born in April-May following a 63-day gestation period. Litter size ranges from 4-7, with an average about 5. Young remain with mother until late summer or early autumn.

Habits The aromatic scent throwability of the skunk is enough to hold back most would-be enemies; however, skunks are favorite food item of great horned owls. The diet consists of both plant and animal matter; small rodents, grasshoppers, beetles, grubs, cottontails, chicken, eggs, corn and oats. Cottontails and chickens are often made available to skunks in the form of carrion. Skunks are essentially nocturnal animals except during breeding season when they may be observed at anytime.

Value The food habits of the skunk make it a generally desirable species to have around a farm. As is true with most wildlife species, however, extremely high populations are not desirable because in skunks high populations are often associated with a high incidence of rabies. The value of skunk pelts varies according to the dictates of fashion and they can be quite valuable when long furs are in

vogue. Their fur is used primarily for jackets and trim. Iowa has an annual trapping season for skunks.

SPOTTED SKUNK (Civet Cat)

Spilogale putorius

Identification Often called the little cousin to the skunk, the spotted skunk is in reality more similar anatomically to the mink or long-tailed weasel. It is the smallest skunk and is black with white spots on head and several more or less broken white stripes on the body. Males are 14-22 inches long with a 7.5-9 inch tail and weigh 1-3 pounds. Females are about 25 per cent smaller.

Range Throughout Iowa.

Habitat Prefers brushy areas away from dense timber or open fields.

Reproduction Gestation period is unknown, but young are born in spring. Litters range from 2-6, with an average of 4.

Habits A nocturnal creature, the spotted skunk is also a good climber. They are active in winter, which is different from the striped skunk. The spotted skunk is omnivorous, but seemingly prefers insects. Other food includes rodents, fruit, birds, eggs, carrion, oats, acorns, apple seeds, corn, grass and wheat. They are efficient mousers and ratters.

Status Beneficial to farmers because of its rodent and insect eating habits. Pelts are used primarily for jackets and trim. There is an annual trapping season in Iowa.

RACCOON

Procyon lotor

Identification Adults vary in length from 32-34 inches including tail of about 10.5 inches. Weights of adults range from 12-18 pounds with a few very fat ones exceeding 25 pounds. Males are larger than females. The black facial mask, and the 5-7 conspicuous black rings and black-tipped tail identify the raccoon.

Range Throughout Iowa.

Habitat Prefers areas with water and trees, but may be found almost anywhere.

Reproduction Raccoons are promiscuous, with the boars (males) mating with several sows (females). Breeding occurs in February-March with the 2-7, usually 4, kittens born after a 63-day gestation period. Typically a hollow tree is used for the den site, but ground dens, caves, or ledges may be utilized. Young remain with mother into November when they disband.

Habits The raccoon could, with some justification, be called "Nature's juvenile delinquent"; because their like for corn in the milk stage, chickens, and tipping over garbage cans seems to keep this species in perpetual trouble. This animal, nocturnal by nature, is omnivorous and eats such items as acorns, various nuts, plums, cherries, grapes, crayfish, clams, frogs, fish, muskrats, birds, and insects to name but a few. They do not wash all food but may do so with some items to remove sand, grit, or secretions. Raccoons have a high degree of animal intelligence and rely on their wits to escape pursuers. They are fairly good swimmers and fight courageously when cornered.

Status An excellent game animal because of its intelligence, much sport is derived from raccoon hunting with coon hounds. Its

CAMPING'S COMING!

Jack Kirstein

In a few short weeks, the woodland flowers will start to push up through the melting snow, the migrating geese will follow the sun up the western shores of Iowa's River boundary, and the songbirds and little forest animals will start their spring routines again.

All these signs of the return of warmer days will set into motion the spring fever that burns into the thoughts of the Iowa camper. Coming to us gradually, but bursting with a sudden realization that spring is here, we find that it is not only time to check on the condition of our camping equipment, but that we should have done it last fall or, at the very least, last month.

Now, before the camping fever pushes us into putting off needed repairs in the heat of getting packed to go, we should attend to

(Continued on page 21)

fur is very much sought after by trappers when ladies' fashions dictate that long furs shall be worn, thus increasing the market value of the pelts. The flesh is very palatable and is looked upon as a delicacy by some people. In the northern portion of their range, raccoons have a winter sleep, with occasional excursions from their dens on warm nights. Iowa has both a hunting and trapping season for raccoons.

WHOPPIN' BIG BUCK BAGGED

Eddie W. Mustard
Game Biologist

"... it sure was the biggest thrill I ever had, for it sure was some deer..." With these words Dean Coffman described his feelings at having bagged a 440-pound whitetail buck. All who have pursued the wily whitetail will agree, even though vicariously, that it must have been quite an experience.

The monstrous buck was taken on the Coffman farm near Blencoe, Iowa, in Monona County during the 1962 gun season. Bill Welker, Biologist with the State Conservation Commission, checked the deer and reported the 12-point (6 right x 6 left) buck was 4.5 years old. The weight of the deer was taken at the Blencoe Co-operative Company at Blencoe and, according to Welker, this was verified by two witnesses.

To our knowledge, this is the largest deer ever taken in Iowa. However, before we start claiming national records for large whitetails, a very quick search of the literature disclosed two larger deer from Wisconsin: a 491- and 481-pounder (Otis S. Bersing, 1956. A CENTURY OF WISCONSIN DEER). Top honors seem to go to a Minnesota deer that tipped the scales at 511 pounds (Arnold Erickson, et al, 1961, THE WHITE-TAILED DEER OF MINNESOTA.)



A comparison of the sizes between Coffman, the hunter, and the 400-pound buck.

Even though this tremendous Iowa deer is not a national record, it is still a fine example of a whitetail and is a virtual giant among deer in a state where 250-pound deer are common.

Our congratulations are extended to Coffman on his bagging of an outstanding example of Iowa's finest game species, the whitetail deer. We're anxious to take him up on his offer to visit him and see his trophy.

PATTERN FOR A SEASON

How Many Have You Seen? Carol Buckmann

Spring is almost here and in the woodlands this not only means a new outlook weatherwise but a new season in outdoor fun—the flower-finding season. Knowing and identifying woodland flowers lasts through spring, summer, and fall as new varieties unfold.

All you need for this intriguing pleasure is a flower guide and possibly a camera. As a suggestion, take this article with you and check off the woodland flowers as you find them.

EARLY SPRING, after mid-March

.... Dwarf Trillium: With three petals, three sepals and three leaves, these white flowers are found on southern exposures of woodland hillsides where the snow melts first. The early spring flowers peer above the ground as soon as the snow melts in March.

.... Hepatica or "Liverwort": Light blue or pink-white flowers with liver-shaped, three-lobed leaves bearing hairy stems. Often found in brown leaves and debris of the woodland floor.

.... Bloodroot: Reddish-orange juice in the stems and roots that "bleed" when broken. The base leaves are wrapped around the flower and spear through the woodland floor before unwrapping the white, single flower.

.... Shad Bush: Found along high clay banks, fronts of hillsides, streams and cliffs. A flowering bush with white, incandescent flowers coming before the leaves and after hepatica.

SPRING, around May 1

.... Rue Anemone or "wind flower": A delicate, slender buttercup with white flower clusters. Leaves are divided into rounded, three-lobed leaflets.

.... Dog-tooth Violet: A member of the lily family with little or no stem. Found in moist woods and meadows, creek bottoms and along rivers. The narrow, pointed leaves, mottled with brown, seem to spring from the earth. White, single bloom.

.... Pepperroot or "crowfoot": The fleshy rhizomes of this plant have a pungent taste. Its basal leaves are deeply lobed and the broad clusters of flowers are purple.

.... Violets: Found in cool, shaded areas everywhere. These robust little plants have deep violet petals, whitish at the base and heart-shaped, deep green leaves.

.... Prairie Wakerobin: A trillium with characteristic three petals, three sepals and three leaves. From the center of the leaves arises a single flower.

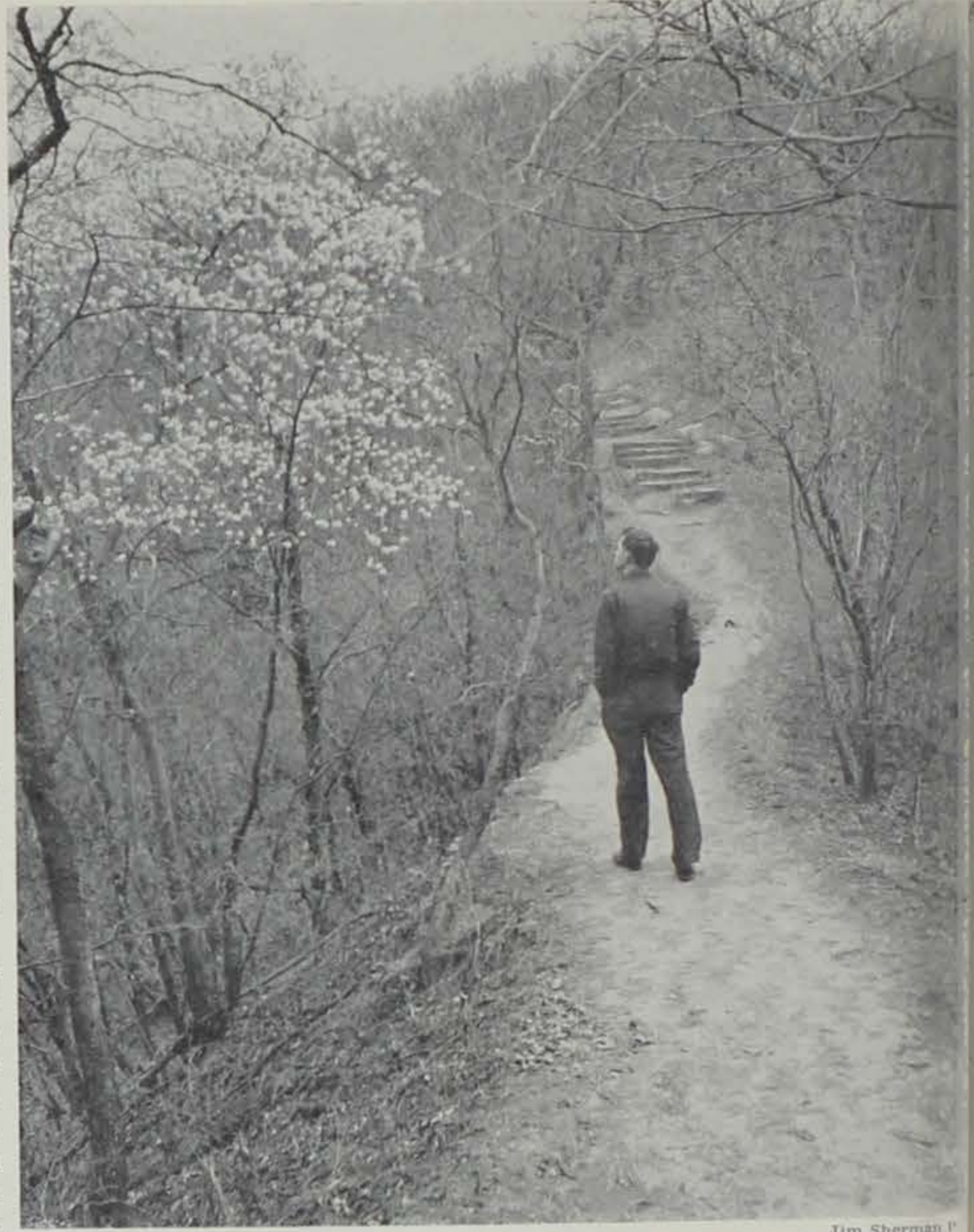
.... Dutchman's Breeches: Fragrant, drooping flowers on a tuft of fern-like foliage resembling "breeches" on a slender clothesline.

.... Bluebells or "Virginia cowslip": Blue petals are on a stout stem. Flowers are drooping and trumpet-like.

SPRING, around May 10

.... Wild Plum: Comes just after red bud, along brushy fence rows and semi-exposed woodlands. This brushy plant has white blossoms.

.... Spring Beauty: Low-growing



Shadbush.

Jim Sherman

and thriving in woodlands in the bright sunlight. Narrow, grass-like leaves and branching, colorful flower clusters are pale, rose pink veined with deeper pink.

.... Yellow Violet: The outer petals are bearded. Heart-shaped leaves and long stems are hairy. Yellow flowers are veined with purple.

LATE SPRING, around May

.... Wood Anemone: The small anemone. The slender stem a trio of long stemmed leaves with three to five wedge shaped leaflets. It bears single, white flower.

.... Shooting Star: Nodding flowers with pistils and stamens together in a spear-like shape with back-turning, pink petals. Found along river banks and open woods.

.... Red Bud: Bright purple blossoms on a leafless stem appearing before the leaves unfolded. Blooms about a week or two after shad bush.

.... Wild Crab: The pinkish, delicate flowers appear within a week.

.... Hawthorn: A spreading thorny bush with white blossoms appearing on hillsides, open areas and at edges of timbered areas.

.... Wild Cherry: Flowers are clusters of white blooms large flowering tree with smooth bark appearing in April.

Other outstanding flowering trees are wahoo, bladder tree and locust.

.... Yellow Lady's Slipper, Showy Lady's Slipper and Showy Orchid are members of the orchid family found in Iowa rarely. To see any of them



Wild Ginger.



Jack-in-the-Pulpit.

Jack Kirstein Photos.

(Continued on page 21)

TERN—

(Continued from page 20)

beauties is a real treat. Found only in very deep forests.

Indian Paint Brush: A hairy plant with pale green calyx surrounding the corolla. This plus the scarlet floral leaves resemble paint brushes dipped in red paint.

Jack-in-the-pulpit: A deep woods favorite with flowers in the center of a pale green pulpit-like spathe. In the summer the spathe withers away revealing bright red berries. Also known as "Indian turnip" because of the edible, underground bulb or corm.

Woodland Phlox or "Sweet William": The bluish-lavender flowers are clustered. The leaves and stems are covered with down.

May Apple: An umbrella-like leaf protects the single, wax-white blossom emerging at the leaf fork. They are often in colonies almost anywhere in the woods. The "apple" is a large, yellow berry.

Green Dragon: A close relative to Jack-in-the-pulpit, these are found in low, moist ground. The inconspicuous flowers are clustered and hidden from view. The flowers become reddish-orange in the fall.

Bellwort: Found in rich woods and thickets, it has oval-pointed leaves and drooping bell-shaped, yellow flowers.

Buttercups: Found in moist, damp places along river bottoms with waxy, yellow flowers.

Nodding Trillium: A later spring trillium, it blooms in late May in ravines and wooded slopes where the soil is rich in humus. A much larger and taller variety than the dwarf trillium.

Columbine: Bright, scarlet-colored flowers found on rocky slopes and shady edges of woods. Petals form five tubes ending in red spurs with nectar within.

False Solomon Seal: Found along woodland slopes and moist bluffs, it has a cluster of small, white flowers each with six spreading oblong segments. These become a mass of red berries in the fall.

Hairy Solomon Seal: The drooping flowers are underneath the stem. These inconspicuous, greenish flowers hang in pairs growing with trillium and bellwort.

Wild Geranium: Frail looking out sturdy plants with pale purple flowers appearing the last week of May. With deeply lobed leaves and hairy stems it appears in rich woods and meadows.

... Wild Strawberry, blackberry and raspberry: These tasty varieties are especially popular when the fruits develop.

... Wild Ginger: The soft, heart-shaped leaves have long stems from the plant base. The maroon flowers are hidden beneath the leaf.

... Wood Sorrel or "Wood Shamrock": A creeping plant with basal compound leaves and delicately tinted flowers with oblong, notched petals. Prefers damp, mossy banks.

... Wild Rose: Our pinkish-white state flower is found in fields, woodlands, roadsides and out-of-the-way places May 30.

MID-SUMMER, July

... Turks Cap Lily: Few flowers are so delicately and strikingly colored as this lily. The orange colored flowers have brown "tiger spots."

... Black-eyed Susan or "Woodland Sunflower": Rough, hairy stems and leaves support showy flowerheads. The yellow ray flowers surround the dark-brown center.

FALL, beginning August

... Great Lobelia: Found in low ground all over Iowa, the flowers are indigo.

... Jewel Weed: The translucent flowers resemble lady's slippers.

... Indian Pipe and Broom Rape: These saprophytes live off decaying vegetation. They are found in the seclusion of thick



Dutchman's Breeches.

Jack Kirstein Photo.

woods and are white with scales instead of leaves.

... Boneset: This stout, hairy stemmed plant grows to five feet. Many small, white flower heads are compactly grouped into a flat-topped cluster.

These are some of the most common Iowa woodland flowers but perhaps you can identify many more.

There's one rule to the game, leave them be and save their beauty for future generations. Wild flowers display their true beauty only in their natural surroundings. Many can stand picking but careless flower seekers all but destroyed many of our most beautiful varieties.

CAMPING—

(Continued from page 19)

the painting, repairing, or replacing of worn items in our camping closet.

The rules we should have followed last fall, about cleaning our sleeping bags, repairing zippers, patching tent screens, replacing ragged tent ropes, and many more, are given added emphasis because of the shortage of time left in which to do these things.

Any torn or threadbare cloth items should be checked for possible repair. All canvas should be stretched out on the floor of a garage or basement, and checked for

(Continued on page 23)

IOWA 1963 FISHING REGULATIONS

INLAND WATERS OF THE STATE				BOUNDARY WATERS	
Kind of Fish	Open Season	Daily Catch Limit	Possession Limit	Minimum Length or Weight	Mississippi and Missouri Rivers and Inland Waters of Lee County
Carp, Buffalo, Quillback, Gar, Dogfish, Gizzard Shad, Sheepshead, Sucker, Redhorse, Chub, Sunfish, Bluegill, Bullhead, Rock Bass, Yellow Bass, Warmouth, Minnows and Sand Sturgeon	Continuous	None	None	None	Same as inland waters
Rock Sturgeon	Closed				Closed
Paddlefish	Continuous	2	4	5 lbs.	Same as inland waters except no catch or possession limit on Mississippi River
Perch, Crappie, Silver Bass	Continuous	15	30	None	Same as inland waters except no catch or possession limit
Trout	Continuous	6	12	None	Same as inland waters
Catfish	Continuous	8	16	None	Continuous open season, no catch or possession limit
Smallmouth Bass	May 25-Feb. 15	5	10	None	Same as inland waters except continuous open season
Largemouth Bass	Continuous	5	10	None	Same as inland waters
Walleye and Sauger	May 11-Feb. 15 N. of Hwy 30 Continuous S. of Hwy 30	5	10	None	Continuous open season. Daily catch 10, possession 20 in aggregate
Muskellunge	Closed				Closed
Northern Pike (Pickerel)	May 11-Feb. 15	3	6	None	Continuous open season. Daily catch 5, possession 10.
Frogs (except bullfrogs)	May 11-Nov. 30	4 doz.	8 doz.	None	Same as inland waters
Bullfrogs (Rana Catesbeiana)	May 11-Nov. 30	1 doz.	1 doz.	None	Same as inland waters

Where waters are located within the confines of state, city, municipal parks, etc., fishing will be permitted only when such areas are open to the public.

EXCEPTIONS: On all state-owned natural lakes, all angling through ice is prohibited between the hours of 6:00 P.M. and 6:00 A.M.

In Little Spirit, Dickinson County; Iowa and Tuttle (Okamanpedan) Lakes, Emmet County; Burt (Swag) Lake, Kossuth County; and Iowa Lake, Osceola County, the following exceptions apply: **WALLEYE**, daily catch limit 6, possession limit 6; **NORTHERN PIKE**, daily catch limit 3, possession limit 3; **SUNFISH**, daily catch limit 15, possession limit 30; **CATFISH**, open season, Saturday, preceding May 15 to February 15, daily catch limit 16, possession limit 16; **SMALLMOUTH** and **LARGEMOUTH BLACK BASS**, open season, Saturday preceding May 30, catch limit 5, possession limit 5; **BULLHEADS**, **CARP**, **SUCKERS**, **REDHORSE**, **BUFFALO**, **BURBOT**, **DOGFISH**, **GARFISH**, **QUILLBACK**, **SHEEPHEAD**, no closed season, no daily catch possession or size limits. The possession limit shall not exceed thirty (30) fish of all kinds in the aggregate except that the aggregate possession limit shall not apply to fish named on which there is no daily catch limit.

LATE WINTER TROUT FISHING

Bill Tate

Assistant Supt. of Fisheries

The year-around trout season allows the Iowa fisherman a sport that can be enjoyed in very few places around the world, winter trout fishing. Early winter trout fishing is similar to other forms of ice fishing, since most trout water is ice covered during the coldest part of the winter. Trout are cold blooded animals and tend to assume a body temperature the same as the water they live in. Under ice cover their food and oxygen requirements are at a minimum and activity is greatly reduced. As the water temperature rises in later winter, the food requirements of the trout increase, they become more active and are easier to catch. A rising temperature gradient, produced by two or more days of moderating weather, increases trout activity and may result in excellent fishing.

Trout that are still around to answer roll call in late winter are wary and have become acclimated to their surroundings. Their food at this time of year is limited to a relatively few types and the water is usually very clear, which makes catching them a challenge.

Trout that are still around to answer roll call in late winter are wary and have become acclimated to their surroundings. Their food at this time of year is limited to a relatively few types and the water is usually very clear, which makes catching them a challenge. Early spring surveys with electric shockers have indicated that good populations of trout overwinter in our better trout streams. These carry-over fish are predominately brown trout and average over a foot in length. The larger brown trout tend to be stay-at-homes. One lunger was taken under the same rock ledge on five successive fall and early spring surveys. (He was identified by marked fins.) The smaller fish tend to concentrate in or near the best food producing areas such as rocky riffles and beds of watercress or other vegetation.

A knowledge of trout feeding habits will help to bag these wary carry-over trout, which may be very selective when feeding. Some fish may feed exclusively on the immature form of one species of insect, or, confine their feeding to fresh water shrimp. Since there are only two or three species of stone flies and a group of very small, dark grey or black flies called midges that occur as adults in late winter, dry flies that imitate them are the only ones that will regularly take fish at this time of year. The larvae and naiads of aquatic insects and fresh water shrimp are the preferred diet for most trout. Wet flies or nymphs that resemble these immature insects or fresh water shrimp are the most effective lures for the fly fisherman.

Time spent in exploring trout habitat and sampling food items will pay dividends in fishing success. A fine mesh net, submerged downstream from rocks as they are overturned, will catch the riffle-dwelling insects as they are swept



Those hardy late winter trout fishermen usually bring home some real "braggin'-sized fish." Jim Sherman Photo.

downstream by the current. Clumps of watercress can be pulled from the water to sample the insects and small crustacea that are present. Drifts of sticks, leaves or other organic debris can be examined for goose worms (larvae of the crane flies) or other aquatic insect larvae that live in this type of habitat. These food items may be used as natural bait or artificial baits which resemble them may be used effectively.

Small insect larvae or nymphs, less than one-fourth inch in length, will catch trout if they are used on small hooks (sizes 16-20) tied on light leaders or very fine monofilament line. Baits or their imitations found in riffle areas should be drifted through riffles into the pool below many times before moving to another area. Most feeding trout will normally move a very short distance for an article of food. They have their meal served by the current and take preferred food items that drift to them in a relatively narrow feeding lane. Natural baits that are normally dislodged from riffles and artificial baits that imitate them should be fished with a natural drift and without sinker or weight for best results. Minnows or other live bait should be allowed to move freely for best results. Streamer flies and other artificials that are designed to imitate these natural baits should be given the action characteristic of the natural bait they represent.

Larger brown trout tend to be non-selective in their feeding and prey voraciously on most foods that are available. They become diurnal in habit, with their activity usually restricted to two pe-

riods, dusk to early darkness and dawn to early daylight. The key to success for catching these large fish is to be fishing at the time they are active! Most any bait or lure will take these large fish if it is presented properly. Live baits that are effective are minnows, frogs, crayfish, night crawlers, salamanders or most any other small creatures that walk, swim, crawl or fly. Artificial lures of every description have caught large brown trout. Several baits and lures should be tried in an area where a large trout may hide or prowl.

As you fish along the stream, try to discover where the trout tend to be in each pool. They may be concentrated in or near the riffle at the head of a pool, in deep water or at the lip of a pool just above a riffle. If you find this is the case, fish only the productive water and you will not waste time fishing where there are no fish.

Late winter trout fishing is not as productive as spring fishing, but you will take fish. They will be beautifully colored, delicious when served, and may be caught again, countless times, in the office or den. Trout caught in late winter are "braggin' fish".

The woodcock never sees what she eats. By driving her three inch bill into the mud, her highly sensitive tip feels earthworms upon which she feeds.

The lynx, which inhabits much of the northern United States and Canada is also found in the northern parts of both Asia and Europe.

A PLACE TO FISH

The increasing concern in Iowa as well as around the nation of a place to hunt, brings to mind the fisherman and his quest for a place to fish. To most Iowa fishermen, this affords no real problem.

Consider the vast network of rivers and streams in the state with every bridge crossing it as a fishing access unless prohibited. Consider too, the miles of river shoreline maintained by parks by most of our larger towns and cities. Then remember the farmer friend with the pond that offered such good bass fishing in spring, the State Park lake a mile from town, and the fish access just down the road that the County Conservation Board put last summer.

If you use a boat, you can take advantage of some of our popular natural lakes. Their shoreline access is cramped to be sure, but most have public launching ramps.

Not so well known perhaps are the fishing access areas maintained by the Conservation Commission. Some of these areas are State Parks, but the majority consist of a few acres along a river or stream. Some two hundred of these areas are listed in a folder available to the public fishing access areas. The folder can be obtained from the Conservation Commission in Ames. Some areas may be more than a small piece of land with no development, while others may have picnic tables, restrooms and even allow camping.

Yes, there are a lot of places to fish in Iowa, but there are a lot of Iowa fishermen to use them.

Teacher Goes To School

Carol Buckmann

Every summer since 1950, teachers of all ages have been earning one or six hours graduate or undergraduate credits at the Teachers' Conservation Camp held at Springbrook State Park near Des Moines.

This outdoor school is open to teachers and students planning to teach after graduation. It is sponsored by the State Conservation Commission, State College of Iowa, and the State Department of Public Instruction.

Along with the credit, Teachers' Camp graduates gain a lasting appreciation of nature and learn ways to develop these attitudes with their students. Credit from the courses offered are acceptable toward natural science requirements apply toward certification.

This remarkable outdoor classroom offers three hours for one one-week session or six credits in two three-week sessions. This year, the first session, Biology 104, runs from June 9 to June 29 and covers forest resources, ecology, fish and wildlife management. The second, Biology 105, runs from June 30 to July 20 and deals in rocks and minerals, soil and land management and water conservation. The third runs from July 21 to August 10 and is a repeat of the first session.

The 640 acre park has timbered woods, sparkling lake, nearby prairie, flowers, birds and wildlife; naturally well-equipped classroom to conduct outdoor studies taught by experts trained in the field of conservation.

Teachers live in the group camp never have any KP duty. All meals are cooked at camp by staff cooks. The recreational facilities of the park include fishing, swimming, hiking and various sports available for enjoyment during leisure hours.

Long before the camp began, the people of Iowa were alerted to the need for conservation through the efforts of J. N. "Ding" Darling, Editorial Staff of the Des Moines Register. While Chief of the U. S. Geological Survey, he stressed that nationwide conservation was impossible unless education became an important part of the school program.

Countless meetings were held to arouse interest in conservation. The idea of a program for educating to teach children in schools the results of wasted natural resources and benefits from conservation programs, was brought up persistently. But this was during the depression and many were more concerned with the economic situation.

Commissioner Mrs. Addison Parker, worked with Ding through the Conservation Commission as a counselor for conservation education. The idea of a camp began with Mrs. Parker who at first started a short workshop session



The collection and construction of teaching aids can help the school teacher carry the conservation story into the classroom.

to which women's clubs would send teachers.

May of 1948, Mrs. Parker presented a report on conservation education movement in Tennessee. The Commission then suggested a movement along this line for Iowa and the Superintendent of the Department of Public Instruction was contacted.

During a 1948 Commission meeting, it was decided the Commission would furnish facilities needed for a group camp for one week teacher training. To help coordinate an education program, in 1949, an Education Assistant was appointed and he began visiting science departments of colleges and universities getting ideas on conservation education promotion.

His trips proved there was interest but little coordinated activity. It had been suggested by Darling to have a Chair of Conservation established at a state college. The Commission contacted the State College of Iowa regarding the feasibility of a head being established there. The College served as the head and interest ran high concerning a camp. State College of Iowa faculty played a large part in establishing the camp.

It was agreed the Conservation Commission furnish the group camp at Springbrook, resource personnel and education assistant while S.C.I. furnish staff, equipment, arrange accrediting and academic requirements.

December 14, 1949, approval was

granted by the State Board of Education for the camp to begin with two identical sessions of three weeks. Interested teachers who received camp brochures or noticed articles on camp in newspapers and magazines, submitted letters. June 4, 1950, the camp formally opened with 25 teachers.

Now, 14 years later, the camp has facilities to adequately take care of 50 teachers each session. During one three week session, teachers travel approximately 1,000 miles to various areas for a view of conservation in action. A bus takes students within fairly short walking distance of points of interest.

The total cost of one three-week session is \$106.50 for undergraduates or \$112.50 for graduates.

To facilitate attendance, sportsmen groups, Soil Conservation Service offices, garden clubs and other groups throughout the state have been donating scholarships varying between \$15 and \$70 to local teachers.

For information on scholarships contact your local Soil Conservation Service Office, sportsmen's clubs, conservation officer or by writing Chuck Haman, Director, Conservation Camp, State College of Iowa, Cedar Falls, Iowa. Or write the Public Relations Section, State Conservation Commission, East 7th and Court, Des Moines, Iowa, for scholarship information, reservations or further information.

CAMPING—

(Continued from page 21)

either mold or mildew. This is a good time to give the tent or dining fly a new coat of waterproofing. Most sporting goods stores or tent and awning companies can supply waterproofing by the gallon so that you can do the job yourself if you are so inclined.

Stoves, lanterns, coolers, and other metal pieces of equipment should be checked for rust, need of paint, worn pump leathers, bent or broken parts, and given a thorough cleaning to make them ready for summer.

One often overlooked item is the addition of better quality tent rope stakes, or the repair of damaged wood or metal stakes. In the rush of breaking camp, many times tent stakes are left behind. Are you sure your tent stakes were packed the last time you took down your tent?

This is also a good time to attend to details such as installing new ropes or grommets in canvas road covers for trailers or cartop carriers. The roof mounts of cartop carriers should also be checked. If you've changed cars since last using them, you can take this time to adjust them to fit the new car.

Is there a new item that you planned to build, such as a kitchen pantry, portable table, or other added convenience? Better make it now before it has to wait for another camping season in 1964.

What other inconveniences did you experience last year? Maybe you got caught in a downpour and vowed that next time you would bring along a tarp or large sheet of heavy gauge plastic for a cover. If so, plan for it now and be ready. Perhaps there were other ideas that seemed good last year that haven't been remembered.

The simple job of packing camping equipment into the car may be complicated if you did change cars this winter. Why not take a few hours now to try packing? If you find that additional space is needed, it will be easier to find a cartop carrier, trailer, or other space-maker now than on a Saturday night this spring when all the stores are closed and the family is raring to go.

If you've often thought of camping in some of the more primitive areas provided by the State Conservation Commission, now would be the time to plan for purchase of additional water containers and some kind of sanitary facility. These areas are exceptionally beautiful and enjoyable. They provide more elbow room due to the lack of camping pressure.

In short, a little attention to repairs and planning now can mean the difference between frustrations later and the chance to feel as free and happy as the songbirds as you perhaps follow the migrating geese north and enjoy the beauty of the blossoming spring flowers.



Denny Behder Photo.

The geese are a beautiful sight when you see them landing nearly on your head.

to enjoy the flight. On the lake you will see what looks like a large ice-floe made up of snow geese resting on the water. They are being joined constantly by others, some sideslipping from great altitudes to land in the flock.

At the same time you will notice the ducks, buzzing around like midgets among their larger cousins. Pintails flying in formation, mallards dabbling along the shore, coot swimming right in front of the main observation point competing with the other birds for attention.

A Close-up View

If you are not satisfied to watch from a distance, you might want to work in closer to the geese. One group last year did this. We donned hip boots and started wading through the marshy shoreline heading for the north side of the lake. Peering through the rushes ahead, we were able to watch the mallards and other puddle ducks dabbling along the shallow bottom. A small flock of white-fronts appeared in a little inlet. White-fronts and Canadas usually keep to themselves off to one side of the main flock of blues and snows. Mergansers were seen working the shoreline, and a flight of old squaws, classified as rare migrants for Iowa, winged at eye level over the water.

As we proceeded through the head-high rushes, a few ducks rose from the water or drifted out toward the center of the lake. However, most of the waterfowl seemed unconcerned over our presence. This afforded an excellent opportunity to learn some duck identification. The ducks were easily spotted with binoculars on the water, and when they took flight they offered a good study for the man uncertain about his different species.

When we reached the dry land on the north side, we started crawling toward the water's edge and the large concentration of blues and snows just out from shore.

A Thrilling Sight

It was about noon, and everyone in the area was about to be treated to one of the day's most thrilling displays. The tempo of the chatter among the geese seemed to increase and, upon looking skyward, one could see long lines of geese coming into the area.

But, when you looked at the sky through binoculars you could see not only low-flying flocks, but lines of geese stacked higher and higher, all heading toward Forneys. From the south they came as far as you could see—likewise, from the north. An unearthly din filled the air as the ground observer saw the sky black with geese. As they reached the lake, they started spiraling down forming a funnel leading from the flock on the water high into the air. The geese would start circling and sideslipping round and round dropping swiftly to the water.

As the geese piled into the concentration on the lake, they spread toward the north shoreline. At this time our group was about fifty yards from the water. Crawling on our stomachs still closer, we were able to watch the geese landing closer and closer to us. They finally were so close we could see their tongues as they came down, necks stretched, wings thrown back, and coral legs dangling to touch the water.

They were landing so close to us that it seemed they were about land in our midst. It was a thrill that dominated our conversation much of that day.

The noise cannot be described—the sound was muted by the voice of thousands of geese near and far. It increased in intensity as the geese directly in front of us spooked suddenly, lifting from the water and circling back toward the main body.

Sometime later, after our group had been waiting a few feet from the water, the whole flock started to drift down in front of our hiding place. Ducks continued to dabble the shoreline less than a foot away and the geese moved within twenty feet of shore.

The day ended for us right then as once again they spooked, lifting from the water, and circled over the east end of the lake.

As they circled the bright sun caught for a moment the beautiful attraction of this whole spring flight. There, with the loess bluffs to the southwest for a backdrop, was a solid wall of geese stacked from the water high into the sky, the sun sparkling on their white feathers.

Our group headed for the car—the day had been complete.

The thrills of the spring goose flight are many—the ducks performing their acrobatics, the beauty of the snow geese, the regal nature of the huge Canadas, and most of all, the sheer numbers of birds to be seen.

Small wonder many people journey to the southwest every year to witness this magnificent wildlife spectacle. It's guaranteed to dominate your conversation for some time afterward.

SOIL CONSERVATION AND FORESTRY

Bill Farris
District Forester

Soil conservation work centers around either the control of or prevention of soil erosion. When we think of soil conservation work, we think of terracing, contour farming, erosion control dams, grassed waterways and so on. Trees are also of value in the control of or prevention of soil erosion.

The amount of soil loss depends upon the type of land use. A field of corn will have more soil loss than a field of oats. An oat field will have more loss than a pasture and so on.

Soils are classified in Iowa in relation to their productivity and erosion hazard. A number of other factors are considered but these two are of primary importance. Soil classifications run from Soil Capability Class I through Class VIII. The Class I through IV land is generally suited for cultivation and other uses.

The class V through VIII land is limited in use and is not generally suited for cultivation. When we check the class VII and VIII land we find areas where forest and wildlife cover is usually recommended.

Forestry is closely related to the problem of land use, particularly on land not fitted for intensive agricultural use. Through coordination with other primary land uses such as agricultural cropping and grazing, a sound forestry program can be set up. Existing timberlands and planted areas form a valuable part of the soil conservation picture in Iowa. These values might be summarized as follows:

1. The branches, twigs and leaves get the first impact of the rainfall.
2. The layer of duff on the soil is absorptive and assists in percolation, about every inch of duff in the forest will hold one-fourth inch of rainfall,

thus delaying or slowing runoff.

3. The tree roots make possible the loosening of the soil and increases its water storage capacity.

4. The tree roots assist in holding the soil in place.

The benefits received from use of forests as a crop must be compared to the alternative use of the land. In making this comparison of benefits, such values as recreation, wildlife development and soil and water conservation must be taken into consideration.

A forest crop may be the alternative on areas: (1) where land has steep topography; (2) where the soil is easily eroded when the surface is disturbed, the area not suited for a forest crop; (3) where, through improper cropping methods in the past, soil is gullied to such an extent as to make ordinary cropping procedure not feasible; (4) where, through lack of native fertility, soil impoverishment through mining the soil is unproductive; (5) where game, recreational or water values outweigh the crop productive value of the soil.

The conversion of some of submarginal land into forest would be in keeping with the present program of the Federal Government to retire from agricultural production extensive areas of this type.

Many farms in all parts of the state have small areas not suited for cropping, which, if mismanaged, may not only result in a loss from the production standpoint but also may actually become a menace to adjoining areas of land. A sound forestry program can be worked out along with adjustment of grazing and cropping methods on the individual farms of the state. This can be accomplished by working closely with the Soil Conservation Service and the District Foresters of the State Conservation Commission.